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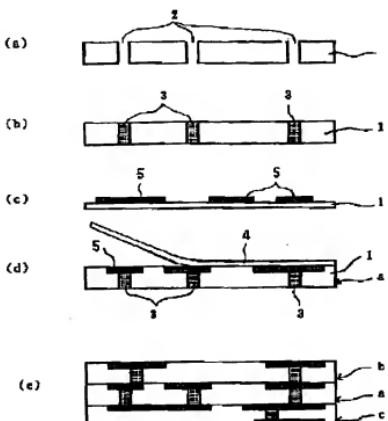
APPLICATION DATE : 31-08-99  
 APPLICATION NUMBER : 11244497

APPLICANT : KYOCERA CORP;

INVENTOR : HAYASHI KATSURA;

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TITLE : INSULATION SHEET FOR WIRING  
 BOARD AND MANUFACTURE  
 THEREOF



ABSTRACT : PROBLEM TO BE SOLVED: To form a wiring board which can transfer excellently a fine wiring circuit layer composed of a metal foil on an insulation sheet, reduces thermal expansion difference from a semiconductor element, and is excellent in resistance to moisture.

SOLUTION: In an insulation sheet in an uncured state or a semi-cured state (B stage), 30-70 vol.% of spherical silica whose average particle diameter is at most 10  $\mu\text{m}$  is contained to thermosetting resin whose melt viscosity at 60-150°C is 103-107 poise. The insulation sheet for a wiring board wherein the coefficient of thermal expansion (20°C) is at most 250 ppm/ $^{\circ}\text{C}$  and the void content is 5-20% after perfect thermosetting is used. By transferring a wiring circuit layer constituted of a metal foil previously formed on a transfer sheet surface on the surface of the insulation sheet, a wiring board is formed.

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